## Low-Cost Silicon Solar Array Project (LSSA) Subcontractor Document Collection, 1969-1987 31.8 cubic feet JPL 77

#### **History**

The Low-Cost Silicon Solar Array Program (LSSA), which was later called the Low-Cost Solar Array (LSA) Project), and finally called the Flat-Plate Solar Array (FSA) Project, was managed by the Jet Propulsion Laboratory (JPL). LSSA was one part of the

National Photovoltaics (PV) Program that supported photovoltaic technology research. LSSA was developed, sponsored, and sustained by the National Science Foundation (NSF), the U.S. Department of Energy (DOE) and its predecessor, the Energy Research and Development Administration (ERDA) as a means of developing alternative sources of energy. Alternative energy sources had risen to a level of national interest as a result of the energy crisis and oil embargoes of the early-1970's.

Concepts for United States energy independence through alternative sources of energy had been explored at the 1973 Conference on Photovoltaic Conversion of Solar Energy for Terrestrial Applications, at Cherry Hill, New Jersey, sponsored by the National Science Foundation. The conference's recommendations and conclusions were used in developing the National Photovoltaics Program. A result of the United States Federal Government's willing interest in PV technology and the Cherry Hill Conference was the LSSA Project, which was one effort to explore alternate sources of energy, in order to make the United States energy independent.

LSSA lasted eleven (11) years, from 1975 to 1986. The LSSA Project was funded to a level of almost \$235 million (\$148 million adjusted to 1974 dollars), and involved 256 research and development (R&D) contracts at 103 United States companies and educational institutions.

The LSSA Project was based on the same crystalline silicon technology that had been developed for the United States Space Program. The costs of this technology were still high in 1975, and the government hoped to reduce the manufacturing costs of solar cells through its LSSA R&D program.

DOE's predecessor, ERDA had asked the Jet Propulsion Laboratory, to implement the LSSA Project. The government hoped that through the LSSA Project it could help develop an infrastructure that would allow an infant industry to survive, ultimately reducing the cost of PV power generation to the point where it would be competitive with conventional fossil-fuel-based power generation. A strategy was developed to involve as many members of the fledgling PV industry as possible to give it both momentum and credibility.

The National Photovoltaics Program was organized into three sub-program areas in 1975: 1) Systems and Applications, 2) Test and Evaluation, and 3) Research and Technology. The Research and Technology program was further divided into two elements: 1) advanced technology, and 2) low-cost single-crystal silicon. JPL assumed responsibility for the low-cost single-crystal silicon element.

The LSSA Program had five goals, which were:

- (1) Develop a process for obtaining solar-cell quality, silicon material suitable for making single-crystal silicon at a price of less that \$35 a kilogram (changed in 1976 to \$10/kilogram);
- (2) Develop and demonstrate automated processes for producing single-crystal silicon sheets;
- (3) Develop and demonstrate automated processes for the complete fabrication of solar cells into array systems at a production rate of more than 500 Megawatts per year at a price of less than \$0.50 per Watt (in 1975 dollars);
- (4) Develop encapsulation materials and techniques for arrays with a design operating lifetime greater than 20 years;
- (5) Develop a capability and produce single-crystal silicon cells for tests of 200-, 400-, and 600-kilowatt systems. Price goals for successive 200-kilowatt increments of production were \$5.00, \$2.00, and \$1.00/Watt (in 1975 dollars).

The LSSA Project's goals were revised in 1977 to reflect changing capacities and deadlines. As a result, the project name was changed in 1978 to Low-Cost Solar Array (LSA) Project in order to indicate that photovoltaic materials other than silicon were to be included within the scope of the Project's responsibilities. Over the eleven-year course of the Project, major changes in national policy within the DOE, shifting government objectives, and changes in the prices and availability of energy sources required constant adjustments to the Project and its goals. That is why, in 1981, the Project name again was changed, this time to the Flat-Plate Solar Array (FSA) Project. Commercial and technical readiness, originally planned for 1982 was rescheduled to 1986.

The JPL approach to the project was similar in organization to JPL flight projects, and the original organization of the LSSA Project followed the technical partitioning of the work effort around the five goals. Responsible JPL individuals included Dr. Marshall E. Alper, Dr. Ralph Lutwack, and John Goldsmith. The technical organization areas, each with a manager, were:

- (1) Silicon materials refinement;
- (2) Single-crystal silicon sheet formation;
- (3) Automated Photovoltaic array assembly;
- (4) Module encapsulation;
- (5) Large-scale production

To achieve these goals, Research and Development was organized into seven Task Areas, those being: 1) Silicon Material Task; 2) Silicon Sheet Task; 3) High-Efficiency Solar Cells Task; 4) Process Development; 5) Reliability Engineering Task; 6) Module Encapsulation Task; and 7) Project Analysis and Integration.

Work on the project was performed by a number of subcontractors for Jet Propulsion Laboratory under JPL contracts, approved by agreement between NASA and the Department of Energy.

The object of the JPL LSSA Project was to develop a simple, foolproof, all-vacuum solar cell automated manufacturing process that produced "medium efficiency" cells, which would be inherently environmentally resistant. All components of the cells were integrated into a single monolithic structure with no material interfaces. The cells were intended to be incorporated into an hermetically sealed, simple module consisting basically of a press-formed metallic superstructure with a separated glass cover for protection to reduce the effects of atmospheric humidity.

The LSSA Project process sequence had been segmented for convenience by JPL into five major work areas or "Tasks": 1) Reduction and purification of the semiconductor material; 2) Sheet or film generation; 3) Device generation; 4) Module assembly and encapsulation; and 5) System completion, including installation of the array and the other subsystems.

The LSSA Project's major accomplishments were:

- 1) establishing basic technologies for all aspects of the manufacture of non-concentrating, crystalline-silicon photovoltaic modules and arrays for terrestrial use;
- 2) crystalline silicon, research solar cells have been fabricated with more than 20 percent efficiency;
- 3) the cost per peak watt of PV power generation originally set for \$0.50/Wp (1975 dollars) was very nearly met;
- 4) calculated that a multimegawatt PV power plant using large-volume production modules that incorporate the latest crystalline silicon technology could produce power for \$0.27 kilowatts per hour in 1985 dollars;
- 5) transferred technologies to the private sector by interactive activities in research, development, and field demonstrations;
- 6) stimulated the establishment of a viable commercial PV industry in the United States.

Several large photovoltaic installations resulted from the Project. ARCO Solar has installed central-station PV power plants in California, one at the Lugo Substation near Hesperia, and another in Carissa Plains. Each plant has operated successfully, providing electricity to Southern California Edison Company and the Pacific Gas and Electric Company, respectively. Union Carbide also built a large-scale plant.

Although the PV technologies developed by the LSSA Project have been considered successful, their application commercially has not been as extensive as imagined. The lack of utilization is not because of technological reasons, but because prices, availability, and other factors related to the fossil fuel market have changed. Since the program was implemented in 1975, fossil fuel energy prices have fallen substantially and supplies have been abundant, reducing the economic competitiveness of photovoltaic energy. There is no guarantee that this will continue to be the case, or that government policies will not change.

This collection contains most of the subcontractor documentation from approximately ninety of the one hundred-three subcontractor institutions and companies in the form of contracts, correspondence, final reports, monthly reports, financial status reports, and quarterly reports.

The Flat Plate Solar Array (FSA) Project was phased out at the end of September 1986.

#### **Provenance**

JPL 77 is an integration of nineteen unprocessed collections and eight previously processed collections. Of the eight previously processed collections, seven were totally integrated into JPL 77. Those seven were JPL 18 (1.9 c.f.), JPL 39 (0.9 c.f.), Accession 90-123 (5.5 c.f.), Accession 90-137 (2.1 c.f.), Accession 90-140 (2.7 c.f.), Accession 90-142 (0.7 c.f.), and Accession 90-144 (0.7 c.f.). Accessions 90-123, 90-137, 90-140, 90-142, and 90-144 had never received JPL collection number assignments. All of these collections contained LSSA subcontractor documents.

The eighth previously processed collection, JPL 17 (1.2 c.f.), was separated in half. One half of JPL 17, consisting of subcontractor documents, was integrated into JPL 77. The other half of JPL 17, consisting of program proposals and Congressional Hearing documents, were left at JPL 17 as the entirety of that collection.

The unprocessed collections that were integrated into JPL 77 were: 90-87 (1.0 c.f.); 90-89 (1.0 c.f.); 90-90 (2.0 c.f.); 90-91 (1.0 c.f.); 90-92 (1.0 c.f.); 90-93 (1.0 c.f.); 90-94 (1.0 c.f.); 90-95 (1.0 c.f.); 90-96 (1.0 c.f.); 90-97 (2.0 c.f.); 90-98 (1.0 c.f.); 90-99 (1.0 c.f.); 90-100 (1.0 c.f.); 90-102 (1.0 c.f.); 90-103 (1.0 c.f.); 90-104 (1.0 c.f.); 90-105 (1.0 c.f.); 90-106 (1.0 c.f.); 90-124 (3.0 c.f.).

Accession 90-87 was 1.0 cubic foot of notes of Lloyd Sanchez, along with engineering specifications on General Electric contract 954607. It was sent to the Laboratory Records Center by William Callaghan of Section 879, the Solar Energy Program, as Shipment L-5158 on July 23, 1979 and transferred to the Laboratory Archives on July 31, 1990.

Accession 90-89 was 1.0 cubic foot of IBM Contract 954144 documents, General Electric Contract 954607 documents, and Gnostic Concepts Contract 954899 documents. The records were sent to the Laboratory Records Center by William Callaghan, Section 879, the Solar Energy Program, on July 21, 1980 as Shipment F-5804/80-407 and transferred to the Laboratory Archives on July 31, 1990.

Accession 90-90 included 2.0 cubic feet of LSSA documentation for the ARCO Solar, Inc. Contract 955325, Bechtel Corporation Contract 954698, Dow-Corning Contract 954559, and Coors Porcelain Company Contract 954878. The records were sent to the Laboratory Records Center on May 3, 1982 by William Callaghan of Section 879, Solar Energy Program, as shipment number F-6717/82-0233. They were transferred from the LRC to the Laboratory Archives on July 31, 1990.

Accession 90-91 consisted of 1.0 cubic foot of LSSA documentation for the RCA Contracts numbers 954465, 954901, and 954817. Sent to the Laboratory Records Center on April 20, 1981 as Shipment F-6174/81-330 by William Callaghan, it was transferred from the LRC to the Laboratory Archives on July 31, 1990.

Accession 90-92 consisted of 1.0 cubic foot of documents for the Varian Associates Contract number 954885 and the Spectrolab, Inc. Contract number 954853. It was sent to the Laboratory Records Center by William Callaghan of Section 879, Solar Energy Program, as Shipment F-6887/82-0331 on August 16, 1982, and was transferred to the Laboratory Archives on July 31, 1990.

Accession 90-93 was 1.0 cubic foot of Spire Corporation Contract 955405 documents and Texas Instruments, Inc. Contract 954412 LSSA documents, sent to the Laboratory Records Center on August 27,

1981 as Shipment F-6347/81-464 by William Callaghan of Section 879, Solar Energy Program. The Laboratory Archives accessioned the records on July 31, 1990.

Accession 90-94 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center on June 9, 1981 as Shipment F-6232/81-371 by William Callaghan of Section 879, Solar Energy Program. The records were transferred to the Laboratory Archives on July 31, 1990. The records represented Solarex Corp. Contracts 681928, 672596, 649006, Solar Power Corp. Contract 672594, and Sensor Technology, Inc. Contract 955266 concerning silicon sheet development.

Accession 90-95 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center on December 1, 1981 as Shipment F-6473/82-0061 by William Callaghan of Section 879, Solar Energy Program. The records were transferred to the Laboratory Archives on July 31, 1990. The contractual documents cover projects with Optical Coating Laboratory (955244), Bernd Ross Associates (955164), Aero-Chem Research Laboratories (954777 & 954862), and Aerospace Corporation (955201), principally in regard to the development of efficient silicon-metal contacts.

Accession 90-96 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center on March 11, 1982 as Shipment F-6625/82-0154 by William Callaghan of Section 879, Solar Energy Program. The records were transferred to the Laboratory Archives on July 31, 1990. The contractual documents included concerned Contract 954868 with RCA Laboratories and Contract 954865 with Sensor Technology, Inc.

Accession 90-97 was 2.0 cubic feet of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-7259/83-0205 on May 24, 1983 by William Callaghan of Section 879, Solar Energy Program. The documents describe silicon development at Lamar University under Contract 954373 and with Crystal Systems, Inc., under Contract 954373. The Laboratory Archives accessioned the documents on July 31, 1990.

Accession 90-98 comprised 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-6210/81-358 on May 20, 1981 by William Callaghan of Section 879, Solar Energy Program. The records were transferred to the Laboratory Archives on July 31, 1990. The documents contained information on Contract 954458 with Rockwell International, and Contracts 954387, 954565, and 954605 with Sensor Technology, Inc.

Accession 90-99 consisted of 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-6017/81-085 on December 2, 1980 by William Callaghan, Section 879, Solar Energy Program. The records include documents related to Contracts 954410, 954653 and 954898 with Lockheed, Contract 672583 with Materials Research, Inc., Contract 954388 with M7, Inc., Contract 954999 with Mobil Tyco Solar Energy Corp., and Contract 954338 with Monsanto Research Corp. for testing protective coatings and application processes to the solar cells. The records were transferred to the Laboratory Archives on July 31, 1990.

Accession 90-100 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-6146/81-305 on April 1, 1981 by William Callaghan, Section 879, Solar Energy Program. The documents contain information on protective coatings development with RCA (954352), Motorola (672592), National Bureau of Standards (W08604), Optical Coating Laboratory (954831, 954197), and Northrop Corp. (954614). The records were transferred to the Laboratory Archives on July 31, 1990.

Accession 90-102 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-6495/82-0072 on December 9, 1981 by William Callaghan, Section 879 Solar Energy Program. The documents contain information on protective coatings development Contract 955217 with Optical Coating Laboratory, Inc. and Applied Solar Energy Corp. (Applied Solar Energy Corp. later merged with Optical Coating Laboratory), Contract 954876 with Battelle Memorial Institute, and Contract 955149 with Burt Hill Kosar Rittelmann Associates. The Laboratory Archives accessioned the documents on July 31, 1990.

Accession 90-103 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-6409/82-0022 on October 15, 1981 by William Callaghan, Section 879, Solar Energy Program. The documents contain information about Varian Associates Contract 954374 on the

development of silicon into sheets and slicing of those sheets. The records were transferred to the Laboratory Archives on July 31, 1990.

Accession 90-104 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-6567/82-0112 on January 28, 1982 by William Callaghan, Section 879, Solar Energy Program. The documents contain information about Battelle Columbus Laboratories Contract 954328 on the Solar Array Module Encapsulation Task of photovoltaic solar arrays for terrestrial applications. The records were transferred to the Laboratory Archives on July 31, 1990.

Accession 90-105 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-6797/82-0279 on June 17, 1982 by William Callaghan, Section 879, Solar Energy Program. The documents contain information about Kayex Corporation's Contract 954888 on the continuous Czochralski growth in silicon sheet development, and Eagle-Picher Industries, Inc. Contract 954877 in regard to the development of improved silicon coatings for solar arrays. The records were transferred to the Laboratory Archives on July 31, 1990.

Accession 90-106 was 1.0 cubic foot of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-6346/81-463 on August 26, 1981 by William Callaghan, Section 879, Solar Energy Program. The documents contain information about Texas Instruments contracts 954881, 954475, 954887, and 955006 in regard to silicon wafering and coatings, and Theodore Barry & Associates Contracts 954800 and 954909 about the creation of costing standards for photovoltaic solar energy collector development, along with development of a cost reduction element using Solar Array Manufacturing Industry Costing Standards (SAMICS).

Accession 90-123 was 5.5 cubic feet of LSSA contract-related records sent to the Laboratory Records Center as Shipment F-7595/C-3 on February 7, 1984 by D. Tustin of Section 720, Civil Programs Office. The records were for contracts with Kinetic Coatings (Contract 955079), Kulicke & Soffa (Contract 955287), Lockheed Missiles & Space Co. (Contract 955696), Materials Research, Inc. (Contract 954977), Massachusetts Institute of Technology (Contract 955382), MB Associates (Contracts 954882, 955281), Meridian Corp. (Contract 955820), Motorola, Inc. (Contracts 954442, 954716, 954847, 955324, 955328, 955339, 955367, 955406, 955844), RCA Corporation (Contracts 955825, 955342), Siltec Corporation (Contract 955282), Solar Power Corp. (Contract 955403), Solarex Corp. (Contracts 955307, 955404), Sol/Los, Inc. (Contract 955318), Spectrolab (Contracts 955055, 955725), University of Arizona (Contract 953461), and University of Delaware (Contract 952666). The records were transferred to the Laboratory Archives on August 8, 1990.

Accession 90-124 was 3.0 cubic feet of LSSA contract related records sent to the Laboratory Records Center as shipment E-7583/C-3 on January 30, 1984 by D. Tustin, Section 720, Civil Programs Office. The documents contain information on the development of a low-cost silicon-on-ceramic sheet growth and device development for the large-area silicon sheet task of the Low-Cost Solar Array Project, through contracts with Aero-Chem Research Laboratories (Contract 955491), ARCO Solar, Inc. (955402 & 955278), Boeing Engineering (954833), Energy Materials Corp (955269), Battelle Columbus Laboratories (954339), C.A.C.I., Inc. (955449), Burt Hill Kosar Rittelman Associates (955614), Kayex Corp. (955270), General Electric (955401), Heliotek (952560), and Honeywell Technology Center (954356).

Accession 90-137 was composed originally of 2.1 cubic feet of material, originating with Dave Tustin of Section 720, the Civil Programs Office in Building 502. These records were received by the Laboratory Records Center on March 13, 1984 as Shipment No. F-7645/84-0137 and transferred to the Laboratory Archives on August 21, 1990.

Accession 90-140 consisted of 2.7 cubic feet of records sent to the Laboratory Records Center on March 8, 1984 by Dave Tustin of Section 720, the Civil Programs Office in Building 502. One cubic foot, the entire contents of Box 4, was permanently withdrawn on December 2, 1985, as were the records of Science Applications, Inc., Contract No. 955787, from Box 3. The remaining three cubic feet were transferred to the Laboratory Archives on August 21, 1990.

Accession 90-142 was 0.7 cubic foot of contract records sent on March 6, 1984 to the Laboratory Records Center by Dave Tustin of Section 720, Civil Programs Office. The Laboratory Archives accessioned it on August 21, 1990.

Accession 90-144 was 0.7 cubic foot of contract-related records sent to the Laboratory Records Center by D. Tustin of Section 720, Civil Programs Office. The records included materials for Solarex Corp. (Contract 954854), Silicon Technology Corp. (Contract 955131), Sensor Technology, Inc. (Contract 955265), and Case Western Reserve University (Contract 954738). The records were transferred to the Laboratory Archives on August 21, 1990.

Three related LSSA accessions were examined, but not integrated into JPL 77. These were accession 90-101, which is 3.0 cubic feet of Photovoltaic Program files of significant events, etc., related to LSSA, but contains no contract documents. Accessions 90-86 and 92-70 are LSSA correspondence, some cost analysis data, computer printouts, and G. Forney's chronological files. There is a very small number of subcontractor documents in Accession 92-70, but they are all duplicates of documents included in JPL 77. These three accessions should be processed as separate collections.

#### **Collection Arrangement and Description**

This collection consists of contract-related documents for the numerous subcontracting companies and educational institutions that were associated with the Low-Cost Silicon Solar Array Project. All of the documents are grouped in alphabetical order by the name of the subcontracting company.

Within each contractor grouping, documents are arranged chronologically in series. The series that are common to practically every company/institution grouping are correspondence, baseline cost estimates, monthly financial reports, monthly technical progress reports, interoffice memoranda, conference reports, quarterly progress reports, and final reports.

In all instances were possible, the full title of the subcontractor's project program is expressed at least once, usually in the file folder statement for its Final Report. If no Final Report was among the documents, that statement is expressed with an alternate appropriate document series, such as the Monthly Technical Progress Reports.

#### **Conservation/Preservation**

Standard preparations were made for long term storage of documents.

#### **Restrictions**

Almost every document in the collection is stamped "For JPL Use Only." There are a total of seven documents are stamped "JPL DISCREET." These are located in File Folder Numbers 71, 72, 576, 675, 1124, and 1201 (2). JPL DISCREET documents are accessible only by JPL employees and contractors.

### **Separation Statement**

No elements of the collection were separated.

## **Finding Aids**

Register available in the repository. List of Subcontractor/Contract Number/File Folder Numbers in relation to Project Goals appended to Register.

#### File Folder List

#### BOX 1

Fld 1 AeroChem Research Laboratories, Contract 954560, Correspondence, Outgoing from AeroChem Research Laboratories, November 1976-February 1978

Fld 2	AeroChem Research Laboratories, Contract 954560, Correspondence, Incoming to AeroChem Research Laboratories July 1977-March 1979
Fld 3	AeroChem Research Laboratories, Contract 954560, Quarterly Technical Progress Reports, October 1976-July 1978
Fld 4	AeroChem Research Laboratories, Contract 954560, Month/Year Technical Progress Reports, September 1976-August 1978
Fld 5	AeroChem Research Laboratories, Contract 954560, Month/Year Financial, August 1976-February 1979
Fld 6	AeroChem Research Laboratories, Contract 954560, Baseline Financial Report, August 1976-October 1977
Fld 7	AeroChem Research Laboratories, Contract 954560, Synthesis of Silane and Silicon in a Non-Equilibrium Plasma Test, Final Report, March 1979
Fld 8 to Fld 10	AeroChem Research Laboratories, Contract 954777, Quarterly Reports, Nos. 1-7, September 1977-April 1979
Fld 11	AeroChem Research Laboratories, Contract 954777, Baseline Cost Estimate, 1977-1978
Fld 12 to Fld 14	AeroChem Research Laboratories, Contract 954777, Monthly Financial Reports, June 1977-August 1979
Fld 15	AeroChem Research Laboratories, Contract 954777, Monthly Technical Progress Reports, Nos. 1-5, June-December 1977
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Fld 16	AeroChem Research Laboratories, Contract 954777, Monthly Technical Progress Reports, Nos. 6-14, January-December 1978
Fld 17	AeroChem Research Laboratories, Contract 954777, Monthly Progress Reports, January-September 1979
Fld 18	AeroChem Research Laboratories, Contract 954777, Silicon Halide-Alkali Metal Flames as a Source of Solar Grade Silicon, Final Report, January 1980
Fld 19	AeroChem Research Laboratories, Contract 954777, Correspondence, Incoming to JPL, 1977-1980
Fld 20	AeroChem Research Laboratories, Contract 954777, Interoffice Memoranda and Correspondence, February-September 1978

Fld 21	AeroChem Research Laboratories, Contract 954862, Quarterly Reports, Nos. 1-5, February 1978-February 1979
Fld 22	AeroChem Research Laboratories, Contract 954862, Quarterly Reports, Nos. 6-7, May-August 1979
Fld 23	AeroChem Research Laboratories, Contract 954862, Baseline Cost Estimate, Revised, January 1979
Fld 24 to Fld 26	AeroChem Research Laboratories, Contract 954862, Monthly Financial Reports, October 1977-August 1979
Fld 27 to Fld 29	AeroChem Research Laboratories, Contract 954862, Monthly Technical Progress Reports, Nos. 1-19, October 1977-August 1979
Fld 30	AeroChem Research Laboratories, Contract 954862, Development of a Model and Computer Code to Describe Solar Grade Silicon Production Processes, December 1979
Fld 31	AeroChem Research Laboratories, Contract 954862, Correspondence, Incoming to JPL, 1978-1980
Fld 32	AeroChem Research Laboratories, Contract 954862, Correspondence, Outgoing to AeroChem, 1977-1980
Fld 33	AeroChem Research Laboratories, Contract 955491, Correspondence, Outgoing to AeroChem, October 1979-January 1980
Fld 34	AeroChem Research Laboratories, Contract 955491, Correspondence, Incoming to JPL, March 1980-June 1981
Fld 35	AeroChem Research Laboratories, Contract 955491, Monthly Financial Management Reports, March-April 1981
Fld 36	AeroChem Research Laboratories, Contract 955491, Monthly Financial Reports, January 1980-February 1981
Fld 37	AeroChem Research Laboratories, Contract 955491, Monthly Financial Reports, October-December 1979
Fld 38 to Fld 40	AeroChem Research Laboratories, Contract 955491, Monthly Technical Progress Reports, Nos. 1-17, October 1979-February 1981
BOX 3	
Fld 41	AeroChem Research Laboratories, Contract 955491, Quarterly Reports, Nos. 1-5, October 1979-December 1980

Fld 42	AeroChem Research Laboratories, Contract 955491, Development of Processes for the Production of Solar Grade Silicon from Halides and Alkali Metals, Final Report, Phases I and II, March 1981
Fld 43	Aerospace Corp., Central Station Applications Implementation Plan, Contract 955434, n.d.
Fld 44	Aerospace Corp., Contract 955718, Correspondence, Outgoing to Aerospace Corporation, October 6, 1981
Fld 45	Aerospace Corp., Contract 955201, Quarterly Reports, No. 1, 1978
Fld 46	Aerospace Corp., Contract 955201, Quarterly Reports, Nos. 2-3, 1979
Fld 47	Aerospace Corp., Contract 955201, Program Plan, September-October 1978
Fld 48	Aerospace Corp., Contract 955201, Monthly Financial Management Reports, February-December 1979
Fld 49	Aerospace Corp., Contract 955201, Monthly Progress Reports, Nos. 1-2, September-November 1978
Fld 50	Aerospace Corp., Contract 955201, Monthly Progress Reports, Nos. 4-9, January-August 1979
Fld 51	Aerospace Corp., Contract 955201, Composition Measurements by Analytical Photon Catalysis, Final Report, October 1978-September 1979
Fld 52	Aerospace Corp., Contract 955201, Correspondence, Incoming to JPL, 1979
Fld 53	Aerospace Corp., Contract 955201, Interoffice Memoranda, JPL, September 1978-November 1979
Fld 54	Applied Solar Energy Corp., Contract 730101, Correspondence, Outgoing to Applied Solar Energy Corp., November 3, 1980
Fld 55	Applied Solar Energy Corp., Contract 954830, Interim Report, August 1979
Fld 56	Applied Solar Energy Corp., Contract 955409, SAMICS Cost Study, Vol. II, 1980
Fld 57	Applied Solar Energy Corp., Contract 955409, JPL Interoffice Memoranda, 1979-1980
Fld 58	Applied Solar Energy Corp., Contract 955409, Correspondence, Incoming to Jet Propulsion Laboratory, 1979-1980
Fld 59	Applied Solar Energy Corp., Contract 955409, Final Design Report, 1980
Fld 60	Applied Solar Energy Corp., Contract 955409, SAMICS Cost Study, Block IV Modules, Vol 1, May 1979-August 1980 (Oversize)

Fld 61	Applied Solar Energy Corp., Contract 955244, Monthly Financial Management Reports, January-December 1979	
Fld 62	Applied Solar Energy Corp., Contract 955244, Conference Report, April 1, 1979	
Fld 63	Applied Solar Energy Corp., Contract 955244, Jet Propulsion Laboratory Interoffice Memoranda, 1978-1980	
Fld 64	Applied Solar Energy Corp., Contract 955244, Correspondence, Incoming to Jet Propulsion Laboratory, 1978-1980	n
Fld 65	Applied Solar Energy Corp., Contract 955118, Jet Propulsion Laboratory Interoffice Memoranda, 1978-1979	
Fld 66	Applied Solar Energy Corp., Contract 955118, Correspondence, Incoming to Jet Propulsion Laboratory, 1980	n
Fld 67	Applied Solar Energy Corp., Contract 955118, Evaluation of Ion Implanted Silicon, Final Report, February 1980	
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Fld 68	ARCO Solar, Inc., Contract 672595, Correspondence, Outgoing from Jet Propulsion Laboratory, December 1977-June 1979	
Fld 69	ARCO Solar, Inc., Contract 672595, Correspondence, Incoming to Jet Propulsion Laborato February-December 1978	ory,
Fld 70	ARCO Solar, Inc., Contract 672595, Monthly Status Reports, January 1978-April 1979	
Fld 71	ARCO Solar, Inc., Contract 672595, Discreet Memorandum, March 1978	
Fld 72	ARCO Solar, Inc., Contract 672595, Discreet Memorandum, March 1978	
Fld 73	ARCO Solar, Inc., Contract 672595, Correspondence, Outgoing from Jet Propulsion Laboratory, December 1977-June 1979	
Fld 74	ARCO Solar, Inc., Contract 672595, Correspondence, Incoming to Jet Propulsion Laborato March-September 1978	ory,
Fld 75	ARCO Solar, Inc., Contract 672595, Contract Reports, October 1977-September 1978	
Fld 76	ARCO Solar, Inc., Contract 672595, Engineering Drawings, June 1977-November 1978	
Fld 77	ARCO Solar, Inc., Contract 672595, Memorandum and Notes, December 1977-October 19	<del>)</del> 79
Fld 78	ARCO Solar, Inc., Contract 672595, 3 Engineering Drawings for Module Assembly, Laminate Assembly, Frame for 10699 JPL Module, February-March 1978 (Oversize)	
Fld 79	ARCO Solar, Inc., Contract 956097, Correspondence, Outgoing from Jet Propulsion Laboratory, January 27, 1982	
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Fld 80	ARCO Solar, Inc., Contract 956097, Block V Intermediate Load Module, Monthly Technical Progress Reports, December 1981-February 1982
Fld 81	ARCO Solar, Inc., Contract 955325, Correspondence, Incoming to Jet Propulsion Laboratory, 1979
Fld 82	ARCO Solar, Inc., Contract 955325, Jet Propulsion Laboratory Interoffice Memoranda, 1979-1981
Fld 83	ARCO Solar, Inc., Contract 955325, Monthly Financial Management Reports, 1979-1980
Fld 84	ARCO Solar, Inc., Contract 955325, Baseline Financial Report, July 1979
Fld 85	ARCO Solar, Inc., Contract 955325, Research and Development Technical Plan, July 1979
Fld 86	ARCO Solar, Inc., Contract 955325, Quarterly Reports, 1979
Fld 87	ARCO Solar, Inc., Contract 955402, Correspondence, Incoming to Jet Propulsion Laboratory, February 1982
Fld 88	ARCO Solar, Inc., Contract 955402, Design, Fabrication, Test, Qualification and Price Analysis of "Third Generation" Design Solar Cell Modules, Part 1: Intermediate Load Module, Final Report, April 1982
Fld 89	ARCO Solar, Inc., Contract 955402, Monthly Progress Reports, August-December 1979
Fld 90	ARCO Solar, Inc., Contract 955402, Monthly Progress Reports, January-March 1980
Fld 91	ARCO Solar, Inc., Contract 955402, Program Plan, Block IV, July 1979
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Fld 654	Memoranda, March 1978-June 1979  Mobil Tyco Solar Energy Corp., Contract 954999, Conference Report, June 5, 1978  Mobil Tyco Solar Energy Corp., Contract 954999, EFG Solar Modules, Final Report, March

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Fld 661	Monsanto Research Corp., Contract 954338, Program Plan, October 16, 1975
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Fld 700	Motorola, Inc., Contract 954442, Semiconductor Grade, Solar Silicon Purification Project, Financial Management Report, Special Reports Nos. 1-5, May 1, 1978-December 31, 1978
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Fld 709	Motorola, Inc., Contract 954716, Monthly Status Reports Nos. 1-9, March 1977-April 30, 1978
Fld 710	Motorola, Inc., Contract 954716, Monthly Status Reports Nos. 10-14, May 1, 1978-September 30, 1978
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Fld 737 Motorola, Inc., Contract 955324, The Development of a Method of Producing Etch resistant Wax Patterns on Solar Cells, Program Plan, February 16, 1979

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Fld 766	Motorola, Inc., Contract 955367, Photovoltaic Module Electrical Termination Design Requirement Study, Task I Report, October 9, 1979
Fld 767	Motorola, Inc., Contract 955367, Photovoltaic Module Electrical Termination Design Requirement Study, Final Report, July 1980
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Fld 785	Motorola, Inc., Contract 955844, Processing Experiments on Non-Czochralski Silicon Sheet (MEPSDU Support Contract), Final Report, April 1981
Fld 786	Motorola, Inc., Contract 955844, Quarterly Technical Report No. 1, October 14, 1980-December 31, 1980
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Fld 852 Fld 853 Fld 854 Fld 855	Photon Power, Inc., Contract LK-720306, Correspondence, Incoming from Photon Power, Inc., March 7, 1980-June 15, 1981  Photon Power, Inc., Contract LK-720306, Investigation of the Reliability of Sprayed Backwall CU2S/CdS Solar Cells for Terrestrial Applications, n.d.  Photon Power, Inc., Contract LK-720306, Sprayed Cadmium Sulphide Solar Cells, n.d.  Photowatt International, Inc., Contract 955410, Monthly Technical Report for Design, Fabrication, Test, Qualification and Cost Analysis of Third Generation Solar Cell Modules, January-July 15, 1980  Photowatt International, Inc., Contract 955410, Monthly Technical Reports for Design, Fabrication, Test, Qualification and Cost Analysis of Third Generation Solar Cell Modules,

Fld 859	Photowatt International, Inc., Contract 955265, Correspondence, Incoming from Photowatt International, Inc., January 24, 1980-November 20, 1980
Fld 860	Photowatt International, Inc., Monthly Financial Reports, Contract 955265, January 19, 1979-January 24, 1980
Fld 861	Photowatt, International, Inc., Contract 955265, Automated Array Assembly Task Development of Low-Cost Polysilicon Solar Cells, Final Report, November 1980
Fld 862	PRC Energy Analysis Company, Contract 955571, Quarterly Contractor Financial Management Report, January 1, 1980
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Fld 864	RCA, Contract 956100, Correspondence, Outgoing to RCA, September 25, 1981-January 27, 1982
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Fld 1433	University of Missouri-Rolla, Contract 955415, Correspondence, Outgoing from Jet Propulsion Laboratory, May 3, 1979-July 17, 1980
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#### **CATALOG DESCRIPTION**

Low-Cost Silicon Solar Array Subcontractor Document Collection, 1969-1987 (Bulk: 1975-1982). 31.8 cubic ft. in 1600 folders (some oversize).

The records in this collection document the Research and Development work performed on the Low-Cost Solar Silicon Array Project (LSSA) by subcontractors to the Jet Propulsion Laboratory (JPL). The LSSA Project was part of a larger Federal government initiative called the National Photovoltaics Program. That program was commenced at the urging of the Federal government by the National Science Foundation (NSF), the U.S. Department of Energy (DOE), and DOE's predecessor, the Energy Research and Development Administration (ERDA). NSF, DOE, and ERDA provided the funding. The object was to explore the development, and manufacture of low-cost solar energy cells that could provide solar energy as a competitively priced alternative energy source to fossil fuels. The National Photovoltaics Program's Research and Development endeavor was divided into many segments. The segment with which the Jet Propulsion Laboratory was tasked involved responsibility for developing the low-cost single-crystal silicon element. Subcontractors, many of who used Jet Propulsion Laboratory facilities, and were overseen by JPL, performed most of this R&D work. Responsible individuals at the Jet Propulsion Laboratory were Dr. Marshall E. Alper, Dr. Ralph Lutwack, and John Goldsmith.

The focus of the Project was modified several times over its life span, 1975-1986, which resulted in its name being changed from Low-Cost Silicon Solar Array, to Low-Cost Solar Array, and finally, Flat-Plate Solar Array.

The LSSA Project resulted in several large solar energy installations, one in Hesperia, California, serving Southern California Edison, and another in Carissa Plains, California, serving Pacific Gas and Electric Company. Changes in the economy and world situation, however, caused prices for fossil fuels to fall in the 1980's and 1990's, preventing the LSSA program from reaching its imagined potential as the impetus for large scale private sector development of solar energy as an alternative source of energy.

The LSSA Project was phased out in 1986.

This collection contains the JPL subcontractor documentation, namely, baseline cost estimates, correspondence, conference reports, monthly technical progress reports, monthly financial reports, quarterly reports, and final reports. There are also some charts and engineering drawings included. Approximately thirty-one of the documents are oversized, all of which are located in Box 105. A list entitled

"Subcontractors, Contract Numbers, and File Folder Numbers in Relation to Project Goals" is located in the Appendix to the Register.

### **Tracings**

Alper, Marshall E.

Lutwack, Ralph.

Goldsmith, John.

Low-Cost Solar Array Project

Flat-Plate Solar Array Project

Jet Propulsion Laboratory (U.S.) Low-Cost Silicon Solar Array Project.

Jet Propulsion Laboratory (U.S.) Low-Cost Solar Array Project.

Jet Propulsion Laboratory (U.S.) Flat-Plate Solar Array Project.

National Photovoltaics Program.

National Science Foundation.

Energy development--United States--Research.

Solar energy--United States--Research.

Silicon crystals--Research.

Photovoltaic power generation--United States--Passive systems--Research.

Research and development contracts, Government--United States.

SOLAR ENERGY CONVERSION

PHOTOVOLTAIC CONVERSION

**SOLAR ARRAYS** 

**SOLAR CELLS** 

PHOTOVOLTAIC CELLS

SILICON COMPOUNDS

#### **APPENDIX**

### JPL 77 LIST OF SUBCONTRACTORS, CONTRACT NUMBERS, AND FOLDER NUMBERS IN RELATION TO PROJECT GOALS

Goal I: Develop a process for obtaining quality silicon material; reduction and purification of semiconductor material.

Goal II: Develop automated processes for producing single-crystal silicon sheets; silicon sheet or silicon film generation.

Goal III: Develop automated processes for fabrication of solar cells into array systems; solar cell device generation.

Goal IV: Develop encapsulation materials and techniques for arrays; module assembly and encapsulation.

Goal V: Develop capability to produce single crystal silicon tests; systems completion and installation of array.

Contract No.	Subcontractor Name	Goal I	Goal II	Goal III	Goal IV	Goal V	Unknown
954560	AeroChem Research	1-7					

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954862	AeroChem Research	21-32					
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954833	Boeing Engineering				205-218		
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Inc.				399-403		
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954888 Kayex Corp.		414-429	407-413			
955270 Kayex Corp.		430-436				
955079 Kinetic Coatings		430-430		437-444		
955287 Kulicke & Soffa			445-457	437-444		
954343 Lamar University	458-481		443-437			
955696 Lockheed Missiles	430-401		482-497			
954653 Lockheed Missiles			404-491	498-504		
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954355 Mobil Tyco Solar		592-651		(5) (5)		
954999 Mobil Tyco Solar			650 660	652-658		
956099 Mobil Tyco Solar		((1 (((	659-660			
954338 Monsanto		661-666	((7, (9)			
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955406 Motorola			773-779			
955844 Motorola			780-787			
952022 Motorola			788			
954689 Motorola			789-791			
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N/A Motorola	700		793-797			
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955563 Norlin		800-801				

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955217 Optical Coating			837-851			
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956100 RCA			863-865			
955342 RCA		866-869				
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955825 RCA		877-887				
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954901 RCA		897-907				
954465 RCA		908-917				
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954868 RCA		710 717	920-937			
954352 RCA			938-949			
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954458 Rockwell		750 750		959-972		
954685 C.T. Sah Associates	973-986			737 712		
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